In Re : National Phase of PCT/IB2003/005718

Filed : May 10, 2005

Page : 3 of 7

## Amendment to the Claims

1-55 (Canceled)

- 56. (New) An isolated multiply acetylated protein HMGB1, or a variant or fragment thereof, or a polynucleotide encoding therefore.
- 57. (New) The isolated acetylated HMGB1 according to claim 56 with the proviso that lysines 2 and 11 are not acetylated.
- 58. (New) The isolated acetylated protein according to claim 56 derivable from a myeloid cell.
- 59. (New) The protein according to claim 56 wherein at least one nuclear localization signal is acetylated.
- 60. (New) The protein of claim 56 wherein one or more of lysines 27, 28, 29, 179, 181, 182, 183 or 184 are acetylated.
- 61. (New) The protein of claim 56 having the acetylation pattern of Figure 2C.
- 62. (New) An isolated acetylated HMGB1 derivable from a myeloid cell.
- 63. (New) A protein according to claim 62 in which at least one nuclear localization signal is acetylated.
- 64. (New) The protein according to claim 62 wherein one or more of lysines 27, 28, 29, 179, 181, 182, 183 or 184 or are acetylated.
- 65. (New) The protein according to claim 62 having the acetylation pattern of Figure 2C.

In Re : National Phase of PCT/IB2003/005718

Filed : May 10, 2005

Page : 4 of 7

66. (New) A polynucleotide encoding for the protein of claim 56.

- 67. (New) A pharmaceutical composition comprising the acetylated protein HMGB1 of claim 56 and pharmaceutically acceptable carrier, excipient or diluent.
- 68. (New) An inhibitor of an acetylated HMGB1 or a fragment thereof, wherein said inhibitor has greater specificity for acetylated HMGB1 over non-acetylated HMGB1.
- 69. (New) The inhibitor of claim 68, wherein said inhibitor inhibits the acetylation of HMGB1.
- 70. (New) The inhibitor of claim 68, wherein said inhibitor is selected from the group consisting of a receptor antagonist and an antibody or an antigen-binding fragment thereof.
- 71. (New) The antibody or antigen-binding fragment of claim 70 wherein said antibody or fragment is polyclonal.
- 72. (New) The antibody or antigen-binding fragment of claim 70 wherein said antibody or fragment is monoclonal.
- 73. (New) The antibody or antigen-binding fragment of claim 70 wherein said antibody or fragment is humanized, single-chain or chimeric.
- 74. (New) The antigen-binding fragment of claim 70 wherein said fragment is selected from the group consisting of a Fab fragment, Fab' fragment, a F(ab')<sub>2</sub> fragment and a Fv fragment.

In Re : National Phase of PCT/IB2003/005718

Filed : May 10, 2005

Page : 5 of 7

75. (New) The antibody or antigen-binding fragment of claim70 wherein said antibody or antigen-binding fragment binds to a peptide consisting of the amino acid sequence AKKGVVKAEKSKKKKE wherein each lysine of said peptide is acetylated.

- 76. (New) A pharmaceutical composition comprising the inhibitor of claim 68 and a pharmaceutically acceptable carrier or excipient.
- 77. (New) The pharmaceutical composition of claim 76 wherein said inhibitor inhibits the acetylation of HMGB1.
- 78. (New) The pharmaceutical composition of claim 76 wherein said inhibitor is selected from the group consisting of a receptor antagonist and an antibody or an antigen-binding fragment thereof.
- 79. (New) The pharmaceutical composition of claim 76 further comprising an antagonist of a cytokine selected from the group consisting of TNF, IL-1a, IL-1B, MIF and IL-6.
- 80. (New) A method of treating an inflammatory condition comprising administering an effective amount of the inhibitor of claim 68.
- 81. (New) The method of claim 80, wherein said inhibitor inhibits the acetylation of HMGB1.
- 82. (New) The method of claim 80, wherein said inhibitor is selected from the group consisting of a receptor antagonist and an antibody or an antigen-binding fragment thereof.
- 83. (New) The method of claim 80, wherein said inflammatory condition is selected from the group consisting of sepsis, acute pancreatitis, adult respiratory distress syndrome, reperfusion injury, cardiovascular disease, peritonitis, rheumatoid arthritis,

In Re : National Phase of PCT/IB2003/005718

Filed : May 10, 2005

Page : 6 of 7

osteoarthritis, inflammatory bowel disease, systemic lupus erythematosus, asthma, organ transplant rejection, graft-versus-host-disease, cachexia, cystic fibrosis, psoriasis and multiple sclerosis.

84. (New) The method of claim 83, wherein said inflammatory condition is selected from the group consisting of sepsis, reperfusion injury, rheumatoid arthritis, multiple sclerosis and cardiovascular disease.